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ABSTRACT

The extent to which an individual's total debt capacity is absorbed at the point of college graduation is examined, along with the graduate's self-imposed debt limits and the debt limits established by the marketplace. The findings are based on the a survey of creditors and the consumers who had student loans. Attention is also directed to data revealing the debt-use patterns of consumers who filed for personal bankruptcy; levels of cumulative student borrowing and starting salaries in various professions in 1981; the proportion of the debt capacity that will have been absorbed by student borrowing; college costs, borrowing patterns, starting salaries, and debt burdens projected to 1988; and implications of borrowing for postsecondary education and consequent consumption patterns of college graduates. Conclusions include the following: (1) there are limits set on the aggregate amounts of debts that consumers may assume; (2) consumers most likely to be affected by debt limits are those who plan to enter the poorly-paid vocations, such as nursing or teaching; and (3) in the future there may be a lowering of aggregate credit limits and an increase in the average size of student loans owed following graduation. A questionnaire is appended. (SW)

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THE ROLE OF EDUCATIONAL DEBT IN CONSUMERS' TOTAL DEBT STRUCTURE

Prepared by

The Credit Research Center

Purdue University

for the

National Commission on Student Financial Assistance

January 31, 1983

The opinions expressed do not necessarily reflect the position of the National Commission on Student Financial Assistance.

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THE ROLE OF EDUCATIONAL DEBT IN CONSUMERS' TOTAL DEBT STRUCTURE

From the inception of the Guaranteed Student Loan Program in 1965 to the 1980-81 school year, 18 million loans had been issued totalling nearly $30 billion.[1] The program was designed to provide low-and middle-income students with a source of funds for post-secondary education, although the eligibility definition for the program has been altered periodically. A major concern of those administering the program is the burden of education debt accumulated during college years and the ramifications of that burden on consumption patterns in post-graduation years. Additionally, attention is frequently focused on the question of students' excess use of education debt and the consequent probability of default in post-education years. To control the extent to which students could overburden themselves with debt, official limits both in terms of the annual amount extended and the cumulative amount of credit that can be obtained have been established.

In spite of such controls, there remains a concern about the economic effects of the burden created by the practice of borrowing to finance a college education. This is especially true in light of the narrowing spread between salaries earned by college graduates and those of consumers without a post-secondary degree. A previous study of debt burdens created by students who borrowed to finance professional degrees concluded that "assuming the conventional 10-year repayment period with equal monthly instalments, about 46 percent of the arts and science borrowers had unmanageable, or burdensome, loans compared to 86 percent of the law students and 83 percent of the medical students."[2]

This study analyzes the debt burden created by student loans in the light of limits placed on the use of credit by lenders and by consumers themselves. The purpose of the analysis is to evaluate the extent to which an individual's total debt capacity is absorbed at the point of graduation and, consequently, the degree to which the graduate will be rationed by credit markets or by personal choice. This rationing has economic implications for the economy in terms of consumption behavior of college graduates.

To analyze the impact of student loans on post-graduate debt capacity and consumption, we surveyed creditors and consumers to determine credit limits as they are established by the marketplace and by consumers themselves. We also reviewed data revealing the debt-use patterns of consumers who filed for personal bankruptcy. These data are useful in evaluating the extreme limit on debt use--the point where the household becomes financially insolvent.

The paper is organized in six sections. In the first section, debt limits established by the marketplace are reviewed. In the second section, self-imposed debt limits as revealed by actual consumer debt-use patterns are analyzed. The debt-use patterns of consumers in bankruptcy are also examined in this section. In Section III data concerning levels of cumulative student borrowing and starting salaries in various professions in 1981 are summarized. With these data, we analyze the proportion of the debt capacity that will have been abosrbed by student borrowing, given various measures of debt capacity. In the fourth section, data concerning college costs, borrowing patterns, starting salaries and debt burdens are projected to 1988. In the fifth section a discussion of the

implications of borrowing for post-secondary education and consequent consumption patterns of college graduates are presented. The final section contains a summary of conclusions drawn from the analysis.

I. Market Debt Limits

There is little theory concerning the optimal use of debt by consumers. Household debt-use patterns have been related empirically to the life cycle, with consumers in the family-formation stages using the most debt, holding other things constant. Cross-sectional variation in the use of debt may also be explained by the uncertainty of future income of the household, personal preferences related to the perceived risk of borrowing and to rationing by the marketplace. Time series variation in debt-use patterns for the population in general may be explained by limits on the supply of credit.

Credit grantors estimate the probability of default for a household by considering both the household's ability and willingness to repay the debt. Ability to repay is best evaluated by analyzing the household's cash flows and the relationship between stable income and fixed obligations, including debt payments. Willingness to repay is a behavioral dimension of the consumer which may best be evaluated by credit history, although regulation of loan contract provisions may change the costs and benefits of default and, thereby reduce the predictive value of that information.

The lending decision involves the evaluation of the risk of default of the individual borrower and subsequent adjustments of loan terms to reach an equilibrium point where the contract provides the appropriate expected return to compensate the suppliers of capital for incurring

the risk of the contract. Given imperfections in the information market, and externalities that limit the flexibility of loan terms, lenders may not attempt to price each contract according to the borrower's unique characteristics. Instead, many lenders establish a "house rate" and define general standards of credit worthiness that all acceptable applicants must satisfy. The standards could be operationalized in the design of a credit scoring system or they could be stated in terms of a specific relationship between total debt and income or periodic loan payments and periodic income. If such standards were used universally by all lenders, consumers would be rationed from the credit market when they no longer satisfied the acceptance criteria.

A. Commercial Bank Guidelines

To ascertain whether lenders used strict debt limits and how the limits were stated in terms of a debt-to-income or loan payments-to-income ratio, we surveyed commercial banks that belonged to the Consumer Banker's Association (CBA), an association of retail banks. This sample was selected to be surveyed because commercial banks have historically provided more than half of total consumer credit extended at any point in time. A mail questionnaire (see Appendix A) was sent to each of the 383 member banks of CBA. A total of 144 responses were received for an excellent overall response rate of 37.8 percent. Respondents were requested to indicate whether they "follow a guideline(s) limiting the total amount of consumer and mortgage debt from all sources, including the loan being requested, that an acceptable applicant for a loan may have?" If the response was affirmative, the respondent was asked to specify how the debt limit was measured and to specify the maximum generally permitted.

Three-fourths of respondents did specify a guideline that limited the total amount of debt a consumer could have relative to income and still be an acceptable loan applicant. Respondents in many cases specified a general limit but indicated that the actual limit varied with type of loan or income level. The measures used along with the minimum, maximum and modal percentage responses are shown in Exhibit 1.

The bulk of respondents specified only one measure although several used multiple limits. Most of the respondents specified a cash flow measure (monthly payments to monthly income) rather than a measure of aggregate debt to income. More than one-third of those who specified a guideline selected the ratio of total monthly debt payments (including consumer and mortgage debt) to monthly pretax income. The maximums permitted for this group ranged from 30 percent to 60 percent, with a modal response of 40 percent.

The next most frequently specified guideline (selected by 19.8 percent of the sample) was a measure of total monthly fixed expenses relative to after-tax monthly income. The maximum for that measure ranged from 20 percent to 80 percent with a modal response of 50 percent. The ratio of total consumer and mortgage debt to annual after-tax income was also selected by 19.8 percent of the sample. The maximums for that ratio ranged from 30 percent to 80 percent with a modal response of 40 percent.

From the results of the survey, it is clear that there is a great deal of diversity across banks both in terms of the specification of debt limit and the absolute value of the maximum. Although all banks currently did not use such guidelines in their credit evaluation process, one would expect that the use of such limits will become more widespread in light of current bankruptcy legislation.

EXHIBIT 1

CONSUMER DEBT LIMITS SPECIFIED BY COMMERCIAL BANKS

Measure	Number Using	Percent Using*	Minimum	Maximum	Mode
Total consumer and mortgage debt/ annual pretax income	9	8.5	34%	60%	35%
Total consumer and mortgage debt/ annual after-tax income	21	19.8	28	80	40
Total monthly payments on consumer and mortgage debt/pretax monthly income	39	36.7	28	60	40
Total monthly payments on consumer instalment and revolving credit/ monthly pretax income	15	14.2	15	40	35
Total monthly payments on consumer and mortgage debt, property tax, insurance and utilities/monthly pretax income	14	13.2	33	40	35, 40
Total monthly payments on consumer and mortgage debt, property tax, insurance and utilities/monthly after-tax income	21	19.8	20	80	50
Total monthly payments on consumer and mortgage debt, property tax and insurance/total after-tax monthly income	5	4.7	15	45	--
Total monthly payments on mortgage and consumer debt/after-tax monthly income	4	3.8	35	50	50
Monthly housing expense/gross monthly income	1	1.0	28	28	28

*Multiple responses were permitted

B. Guidelines of Other Lenders

Consumers are likely to buy a first home upon completion of post-secondary education. In that case, limits set on the use of debt by mortgage lenders are important in the evaluation of debt capacity. Federal National Mortgage Association (FNMA), a private organization that makes a secondary market for conventional home mortgages, specifies guidelines on the use of credit by mortgagors. These guidelines are stated in terms of monthly housing expenses and total monthly obligations relative to stable monthly income of the borrower. The precise wording of the limit imposed by FNMA follows:

> In regard to single-family properties, FNMA considers the monthly housing expense to be the sum of the monthly principal and interest payments on the mortgage, hazard insurance premium, real estate taxes, and, if applicable, mortgage insurance premium, homeowners association dues (excluding unit utility charges), ground rents (lease-hold payments) and subordinate financing, if applicable. Utility charges are not included in the housing expense since such charges vary because of differences in utility rates, family size and living style; however, the underwriter must consider the impact that utility charges and potentially rapid increases in other housing expenses, such as hazard insurance premiums and real estate taxes will have on the ability of the borrower to meet the monthly housing expense and maintain the property. Consideration must be given to the energy efficiency of the property, especially energy-efficient items which will reduce the energy cost of the property, thus permitting a greater portion of the borrower's income to be applied to housing expenses. Generally the monthly housing expense should not exceed a range of 25-28% of the stable monthly income of the borrower.
>
> FNMA considers total monthly obligations to be the sum of the monthly housing expense, payment on installment debt which has more than 10 remaining payments, and alimony, child support or maintenance payments. Generally the total of all monthly obligations should not exceed a range of 33-36% of the stable monthly income of the borrower.
>
> Higher payment-to-income ratios may be justified by other considerations such as:
>
> (1) energy efficiency of the property or energy efficient items;
>
> (2) demonstrated ability of the borrower to devote a greater portion of income to basic needs, such as housing expense;

(3) demonstrated ability of the borrower to maintain a good credit history, accumulate savings, and maintain a debt-free position;

(4) a large down payment on the purchase of the property;

(5) potential for increased earnings of the borrower as indicated by education or job training relative to the time employed or practicing in his/her profession;

(6) borrower's net worth substantial enough to evidence an ability to repay the mortgage;

An alternative secondary market for mortgages is that provided by Federal Home Loan Mortgage Corporation (FHLMC). The debt limits specified by FHLMC are the same as those established by FNMA.

The Department of Housing and Urban Development, which oversees the FHA-subsidized mortgage loan programs specifies (italics supplied):

> The mortgagor's income will be considered adequate if the total prospective housing expense does not exceed 35 percent of the mortgagor's net effective income, and if the total of the prospective housing expense and other recurring charges do not exceed 50 percent of the mortgagor's net effective income.
>
> In addition, this provision authorizes the consideration of favorable compensating factors to justify exceeding these limits in some cases.
>
> Because of current economic conditions, we believe many homeowners are compelled to pay a much larger portion of their incomes for housing expenses. Therefore, we have instructed our field offices to consider such favorable compensating factors as the reduction in IRS tax liability due to homeownership, past savings accumulated at a rate comparable to the increase in housing expense, and any other factors that indicate the borrower is, in fact, capable of substantially exceeding these net effective income ratios in paying for monthly shelter costs. In view of the President's directive to assure the maximum opportunity for families to purchase a home, we have instructed our field offices further that they may utilize modestly higher net effective income ratio guidelines for such borrowers, in the amounts of 38 and 53 percent respectively. This will accommodate the currently more severe economic conditions. Within this framework and where circumstances warrant, we have also authorized use of the Veterans Administration's "residual income" approach to determine the sufficiency of the borrower's income. Moreover, mortgagees may determine in some instances that even greater contributions by the borrower than would be justifiable under the 38/53 guidelines approach are allowable if the compensating factors of a given case support such a determination.

Mortgage lenders who are considering an application for an FHA/VA mortgage establish their own standards for an acceptable relationship between fixed expenses and income. One lender indicated that for FHA loan applicants, the maximum ratio allowed for housing expenses including utilities relative to income ranged between 25-33 percent. For VA loan applicants, the maximum was 33 percent.

The conclusion that can be drawn from this section of the study is that many retail banks and mortgage lenders do specify limits on consumers' use of credit. However, the limits applicable to consumer loan applicants vary considerably across lenders, and a fourth of commercial banks responding to the questionnaire do not follow such guidelines. The limits pertaining to mortgage loan applicants for government-guaranteed mortgages are dictated by administrators of various programs and are likely to show little variation across lenders.

Commercial banks are very important suppliers of consumer credit but there are many other lenders in that market. If it could be argued that commercial banks serve the low-risk segment of the consumer market, we would suggest that, other than consumers' self-imposed guidelines, the maximums specified by banks and mortgage lenders are the most binding restrictions that would be found by a person shopping for credit. A recent study of risk segmentation in the consumer credit market found that the market for unsecured personal loans was segmented by risk when various types of lenders serving that market operated under different loan rate ceilings.[3] Banks served consumers who were classified as low-risk consumers and finance companies served the high-risk segment of the consumer population. In the alternative scenario where both types of lenders operated under the same rate ceiling, there was not a significant

difference in the risk characteristics of a sample of borrowers with loans from one or the other type of lender. Consequently, the extent to which lending limits specified by banks would be expected to be the most restrictive is a function of the legal environment in one's state of residence. With recent relaxation of usury ceilings in many states, the loan limits specified by our sample of banks are probably representative of the general limits placed on consumers shopping for unsecured credit at financial institutions.

Generally, debt limits are more strict for unsecured loans than for secured loans, holding other things constant. With an unsecured loan, the lender simply receives a promise of repayment out of the borrower's future income. With a secured loan contract, the lender's expected loss is limited to the excess of the loan value over the market value of collateral at the time of default. Although the secured lender is not indifferent to the condition of the borrower's cash flow relative to fixed obligations, the risk of a secured loan is not wholly dependent on the characteristics of the borrower. Rather, it is a function of the relationship between loan balance and collateral value throughout the term of the loan. Consequently, graduates who are restricted by the market in terms of their use of credit after graduation will be likely to encounter constraints on the use of unsecured credit (revolving credit, cash credit), but will be able to obtain secured credit for vehicles, home appliances, etc.

II. Self-Imposed Debt Limits

In spite of abundant literature on debt limits for business firms, there is little extant theory about the optimal use of debt by households. And, as is apparent from the results of the lender survey, the market does not set strict limitations on consumers' ability to borrow. As a consequence, one might conclude that debt-use patterns are largely determined by individual preferences and that self-imposed debt limits may be a better indicator of the effect of education debt on the future use of debt by graduates. Survey data from two surveys, a national survey of households performed in 1977 and a household survey performed in a four state area in 1979, were used to evaluate patterns in self-imposed debt limits. Data for respondents in the 25-35 year age bracket were analyzed because (1) this life-cycle group was expected to use the most debt and, (2) this age group was most like new graduates of professional education programs where the greatest use of education debt is found.

We chose to concentrate on the burden of education loans relative to income with 1981 as the initial period in the study because that was the latest year for which education loan data were available. Although the survey data are not current (1981) there is no evident reason to believe that the debt-use patterns found during the time period covered by the surveys should not be representative of debt-use patterns that would be observed in 1981. Aggregate debt payments on consumer and mortgage credit relative to disposable income increased steadily from 1950 to 1970, but there has been little trend in that statistic in the post-1970 period. Aggregate statistics on the ratio of consumer instalment debt payments relative to disposable income showed a decline from 16 percent

to 15 percent from 1977 to 1981. However, during that same period, mortgage debt payments as a percent of disposable income increased from 4.76 percent to 5.13 percent. Consequently, aggregate statistics reveal a relatively stable relationship between total debt payments and disposable, personal income over the period from 1977 to 1981.

The percentage of families with no consumer debt was also fairly stable in the last decade (51 percent in 1970; 49.7 percent in 1977).[4]

> However, the amounts owed by credit users had increased. Between 1970 and 1977, median debt of those with debt approximately doubled, a substantially greater increase than the 56 percent growth in the consumer price index during the same period. Much of the rise in median debt undoubtedly can be explained by the inflated prices of good bought on credit. However, since debt has expanded more rapidly than prices, it appears that consumers have been willing or able to incur more debt."[5]

Consumers in the higher income brackets (greater than $15,000) were more likely to have debt in 1977 than they were in 1970. Coupled with the trend toward extended repayment periods, the greater use of debt by upper-income consumers would explain the fact that, although the amount of credit owed had increased, the debt burden, as measured by monthly debt payments to monthly income, did not increase substantially from 1970 to 1977.

In the following section, we identify self-imposed debt limits by analyzing the distributions of the ratios of total monthly debt payments to pretax monthly income and total debt relative to pretax income. These two ratios were the only ones for which sufficient data from the consumer surveys were available. In addition, these two ratios compare directly with measures most frequently used by lenders.

A. Total Monthly Debt Payment to Monthly Pretax Income

The ratio of monthly consumer and mortgage debt payments to income is frequently referred to as an indicator of consumer liquidity. Since 1970 the ratio has ranged between 20 and 22 percent for the total population. In the 1977 data the average of the ratio of total monthly debt payments including mortgage payment, rent payment, and payments on credit cards and instalment debts to pretax monthly income for respondents in the 25-35 year age bracket was 40.57 percent (Exhibit 2). (To calculate the ratio, monthly payments on credit card balances were assumed to be the minimum monthly payment unless the respondent specified that he or she always paid the balance. In that case, the monthly payment was equal to the outstanding balance.) The ratio for about 84 percent of the group was less than or equal to the modal maximum of the ratio as determined in the lender survey. Thus, a large portion of consumers' self-imposed debt limits were stricter than the limits set by lenders. The rest of the sample had monthly debt payments to pretax income that exceeded 40 percent. About three percent of the sample appeared to be in grave financial trouble with monthly debt repayment obligations in excess of monthly before-tax income.

Given the inclusion of rent payments in the numerator for those respondents who do not own their home, it is not unusual that only about 3 percent of the sample had a zero value for the ratio of payments to income. However, about 20 percent of those respondents in the 25-35 age bracket had no mortgage debt or consumer debt at the time of the survey. These data appear reasonable in light of other information on debt-use patterns. About 50 percent of all respondents to the survey had no instalment credit obligations at the time of the survey in 1977. In

EXHIBIT 2

SELF-IMPOSED DEBT LIMITS, 1977[a]

(Respondents in 25-35 age bracket)

N = 638

	Ratios	
	Monthly Consumer & Mortgage Debt Payments/Monthly Pretax Income	Total Consumer & Mortgage Debt/Annual Before Tax Income
0 %	2.9%	18.8%
1 - 20	37.6	22.1
21 - 40	42.3	7.8
41 - 60	9.5	4.7
61 - 80	4.4	6.0
81 - 100	.8	7.8
> 100	2.5	32.8
Total	100.0%	100.0%
Mean	40.57%	

SOURCE: Durkin and Elliehausen, 1977 Consumer Credit Survey.

[a]Based on a national survey of 2,563 households performed in 1977 by Survey Research Center for the Federal Reserve Board of Governors.

addition, about 40 percent of the total sample did not use any type of credit card in 1977.

The survey data collected in 1979 showed a significant difference from the 1977 data in the ratio of monthly debt payments to monthly income (Exhibit 3). The average ratio for this sample was almost 30 percent. Almost 40 percent of both samples had debt payments that represented 21-40 percent of before-tax income. And, approximately 83 percent of both samples had a ratio of debt payments to income that was less than the 40 percent modal limit set by our respondent commercial banks.

The differences in the average ratios for the two samples do not necessarily reflect a trend in debt-use patterns of consumers in the 25-35 age bracket. The sample designs for the two studies were considerably different. Regardless of the differences, the results of both surveys are presented primarily to show the diversity of debt-use pattern and to show that many consumers used less debt than would be available according to limits set by lenders of consumer loans but that a significant percentage of consumers (about 15 percent) were able to acquire very large amounts of debt.

B. Total Debt to Pretax Income

The ratio of total debt outstanding to annual pretax income gives a rough indication of a payout period for debt. Since 1970, aggregate data (Exhibit 4) show that ratio increasing from 62.5 percent to 74.9 percent in 1981. This trend can be attributed to the rapid increase in housing costs relative to income over the same period.

EXHIBIT 3

SELF-IMPOSED DEBT LIMITS, 1979[a]

(Respondents in 25-35 age bracket)

N = 944

	Ratios	
	Monthly Consumer & Mortgage Debt Payments/Monthly Pretax Income	Total Consumer & Mortgage Debt/Annual Before Tax Income
0 %	1.2%	20.7%
1 - 20	42.0	23.3
21 - 40	39.8	10.1
41 - 60	8.3	7.0
61 - 80	3.1	8.1
81 - 100	2.1	7.2
> 100	3.5	23.6
Total	100.0%	100.0%
Mean	30.0%	

SOURCE: Credit Research Center, 1979 CRC Consumer Credit Survey.

[a]Based on a survey of 3,572 consumers in four local markets in Arkansas, Illinois, Louisiana, and Wisconsin in 1979 by the Credit Research Center, Purdue University under a grant from the National Science Foundation.

The distributions of this ratio from the consumer surveys are shown in Exhibits 2 and 3. An interesting characteristic of the distribution is that a significant portion of the sample used no debt at the time of the survey. About 20 percent of respondents in the 25-35 year age bracket had no consumer or mortgage debt in 1977 and 1979. In contrast, about 36 percent of the samples in general had no debt outstanding, a fact that is indicative of the importance of debt to families in the early family-formation stage of the life cycle--the group represented here. About 25 percent of both samples had total debts that exceeded total annual before-tax income, a probable characteristic of middle-income families with mortgages. Contrast those figures with the modal maximum for that ratio from the lender survey of 35 percent. Less than ten percent of lenders who followed a guideline used that particular one. The modal value of the total debt to after-tax income (used by 19.8 percent of the sample) was only 40 percent. Thus, it appears that self-imposed limits on total debt use relative to pretax income are somewhat less restrictive than those imposed by banks in the marketplace. This result is to be expected, given the heavy demand for credit by consumers in this age bracket.

The self-imposed debt limits show that a sizeable number of consumers had not restricted their use of credit to an extent comparable with limits imposed by some commercial banks. Given the multiplicity of competitors in the consumer credit marketplace, this is not an unlikely event. However, one must question the extent to which one's debt burden can be safely expanded. To evaluate the extremes of self-imposed limits we analyzed the use of debt by persons filing for

EXHIBIT 4

TOTAL DEBT TO DISPOSABLE PERSONAL INCOME

	Percentage
1970	62.5
1971	63.7
1972	66.9
1973	67.1
1974	65.8
1975	64.3
1976	66.7
1977	71.4
1978	77.7
1979	79.3
1980	76.6
1981	74.9

SOURCE: Board of Governors of the Federal Reserve System.

bankruptcy in 1981. (Exhibit 5) Most petitioners for bankruptcy were young (less than 44 years old) and thus are generally included in the age group being analyzed in this study. Almost half of the sample of persons who filed for bankruptcy had total debt outstandings that exceeded annual income. It is noteworthy that only about one-fourth of the petitioners for bankruptcy were homeowners.

These data indicate that all persons who filed for bankruptcy relief from their debts did not have extreme debt burdens relative to consumers in the 25-35 age brackets. But more importantly, the data show that huge amounts of consumer credit can be obtained, even though some lenders place restrictions on consumers' use of credit. In Exhibit 6, the various sources of consumer credit used by a sample of consumers filing for bankruptcy are shown. As the burden of consumer debt increases, it is apparent that consumers are forced to use more credit from marginal credit suppliers like retailers, dealers, friends and medical sources. These lenders may be less likely than commercial banks to perform an extensive credit investigation or to place severe limits on the consumer's use of credit.

Consumers limit their own use of credit to levels generally below maximum levels established by the marketplace. However, the limits established by the marketplace are not universally enforced. The major implication of this finding in our analysis of student borrowing is that the limits placed by suppliers of consumer and mortgage credit are likely to have an insignificant effect on the consumption behavior of college graduates, unless they freely choose to restrict their own use of credit because of the burden of education debts. Further analysis is required

EXHIBIT 5

TOTAL DEBT AS A PERCENTAGE OF

BEFORE-TAX INCOME

	Bankruptcy Sample*
0 %	0
1 - 20	1.7
21 - 40	5.3
41 - 60	10.3
61 - 80	13.5
81 - 100	9.6
> 100	59.6
	100.0%

*67 percent of this sample was below the age of 44. Based on a survey of 1,199 consumers in ten states who filed a straight (Chapter 7) bankruptcy.

EXHIBIT 6

TYPE AND NUMBER OF CREDITORS

(AVERAGE)

	Total Consumer Debt/ Pretax Family Income							
	<50%		50-74%		75-100%		>100%	
	% Had Debt*	Average #	% Had Debt	Average #	% Had Debt	Average #	% Had Debt	Average #
Banks	(51)	1.78	(50)	2.09	(63)	1.92	(64)	2.22
S & L	(2)	1.25	(2)	1.0	(3)	1.0	(5)	1.30
Credit unions	(11)	1.21	(20)	1.17	(25)	1.15	(17)	1.33
Finance companies	(36)	1.90	(38)	1.57	(45)	1.69	(42)	1.66
Retailers	(71)	2.93	(78)	3.15	(80)	3.32	(77)	4.58
Dealers	(15)	2.22	(19)	1.93	(24)	3.23	(29)	5.44
Medical	(59)	3.73	(62)	4.35	(58)	5.82	(64)	4.79
Friends	(4)	1.44	(8)	1.44	(13)	1.47	(19)	2.19
Other	(69)	2.87	(72)	3.21	(74)	3.19	(78)	4.97
N	213		211		130		540	
Average income	$11,461		$12,317		$12,594		$9,008	

*Percent who had debt from this particular type of creditor.

SOURCE: Credit Research Center, Purdue University, Consumer Bankruptcy Study.

however, to ascertain the extent to which student borrowing does absorb debt capacity as defined by the credit market or by consumers' themselves for the average college graduate.

III. Patterns of Accumulated Borrowing and Expected Income for College Graduates

There are multiple sources of education loans, although the National Direct Student Loan Program (NDSL) and the Guaranteed Student Loan program (GSL) are the major ones. Other sources are state and college loan programs and regular bank loans. Although a student may borrow funds from several different programs to finance a year of college, in the following analysis we are concerned with only the burden created by GSL borrowing. Consequently, the actual debt burden of students may be somewhat understated in our analysis.

Students are limited in their ability to borrow from government-sponsored programs to finance their college education. The Guaranteed Student Loan program specifies a $12,500 maximum cumulative debt for undergraduates and $25,000 for a student who borrows for both an undergraduate and advanced degree. Statistics on cumulative education debt reveal that the average size of loan when GSL loans go into repayment is $2,560.[6] An independent study showed that in 1977 the median cumulative debt level of students going into repayment was $2,700.[7] If these numbers are inflated to reflect changes in the Consumer Price Index (CPI) between 1977 and 1981, the median cumulative debt when a loan went into repayment in 1981 was $3,800.[8]

The ETS study of graduate student borrowing in 1980-81 found the following cumulative levels of indebtedness for students completing various advanced degree programs:[9]

Medical (private school)	$31,000
Medical (public school)	21,000
Business (private school)	11,500
Law (private school)	14,000
Law (public school)	10,400
Business (public school)	6,500
Arts & Sciences (private school)	7,350
Arts & Sciences (public school)	6,030
Other (private school)	16,000
Other (public school)	10,000

These data indicate that cumulative student borrowing was usually less than $3,000 at the point of graduation in 1981 for most students, but the total amount borrowed was much higher for some, especially for people in graduate and professional degree programs. Data in Exhibit 7 show that for a sample of GSL loans that were processed by state guarantee agencies, 77 percent were less than $3,000. Less than two percent of loans represented balances exceeding $9,000.

Even with fairly lofty amounts of cumulative borrowing for education, concern about those levels of indebtedness must be conditioned on the basis of the students' anticipated income upon graduation. Data were collected to show starting salaries for new graduates with undergraduate or advanced degrees in selected occupations in 1981 (Exhibit 8). On average, students with undergraduate degrees had starting salaries that were approximately $4,000 less than starting salaries of persons with masters degrees in the same field. Average starting salaries for undergraduates ranged from about $12,000 to $23,000. Salaries for new

EXHIBIT 7

LOAN REPAYMENT STATUS BY SIZE

OF CUMULATIVE LOAN AMOUNT

Loan Size	Number	Percent
$ 1 - 1,000	533,587	19.4%
1,001 - 2,000	740,652	26.9
2,001 - 3,000	839,050	30.5
3,001 - 4,000	179,285	6.5
4,001 - 5,000	267,848	9.7
5,001 - 6,000	57,560	2.1
6,001 - 7,000	38,449	1.4
7,001 - 9,000	54,199	2.0
9,001 - 11,000	26,037	1.0
11,001 - 13,000	7,556	*
> 13,000	10,931	*
	2,755,154	100.0%

*Less than one percent

SOURCE: John B. Lee, "Study of Guaranteed Student Loan Default Rates," p. 24.

EXHIBIT 8

ANNUAL EARNINGS FOR SELECTED PROFESSIONS

1981

Position	Degree	Annual Salary 1981
Accounting	BS	$18,819
	MS	22,304
Actuarial	BS	14,637
	MS	19,140
Anthropologist	BS	14,916
	MS	18,401
Bank officer	BS	16,728
	MS	20,074
	MBA	25,092
Supervisor (blue-collar)		25,092 Average
Chemist	BS	16,401
	MS	22,193
	PhD	26,853
City Government		22,304
Dietician		15,800
Extension Agent		23,698
School Counselor	Mean	24,674
Dentist		24,183
Dietician		17,564
Technician (Engineering & Science)		14,637
Job Analyst		16,100
EEO		17,100
Engineering	BS	23,419
	MS	26,068
	PhD	33,456
Historian	BS	14,916
	MS	18,401
Lawyer	small firm	11,152
	Wall Street firm	40,426
	Private industry	25,092
Librarian	MS	16,580
Marketing Research	BS	19,516
	MS	25,092
Math	BS	20,631
	MS	23,698
	PhD	31,365
Physical Therapist		17,000
Teacher	BS	13,000
Social Worker	BS	12,000

EXHIBIT 8--continued

ANNUAL EARNINGS FOR SELECTED PROFESSIONS

1981

Position	Degree	Annual Salary 1981
Political Science	BS	$14,916
	MS	18,401
Programmer	BS	18,122
Nurse	BS	13,672
Teacher	BS	
	Kindergarden & Elem.	13,000
	Secondary	
Veterinarian (Gov't. employee)		21,065
Veterinarian		25,092
Physician	1981 in residency	17,000
	VA (after residency)	51,500
	Avg.	74,500

Assuming that salaries on average move with the Consumer Price Index the appropriate level of salary for 1981 is 139.4 percent of the 1978 salary and 125.3 percent of the 1979 salary (if given).

SOURCE: Occupational Outlook for College Graduates, 1980-81, U.S. Department of Labor, Bureau of Labor Statistics, December 1980, Bulletin 2076.

graduates with professional degrees ranged from $11,152 (for a lawyer in a small private practice) to $40,000 for a lawyer who becomes employed by a Wall Street law office.

To evaluate the impact of student borrowing on post-graduation debt capacity, the monthly payments for various cumulative loan amounts were calculated assuming a 10-year and a five-year repayment period at nine percent annual interest (Exhibit 9). These payments were used to calculate a measure of debt usage (monthly debt payments to monthly pretax income) at the various levels of starting monthly income that might be expected by a new graduate (Exhibit 10,11).

In view of the modal debt payments-to-monthly income ratio found in the lender survey (40 percent), it is apparent that for a 10-year repayment period, the average student debt repayment obligations do not utilize an excessive portion of the debt capacity of the average undergraduate student (assuming that the average amount of cumulative borrowing was $3,800 when the loan went into repayment in 1981). Even at the lowest monthly income level considered ($417) loan repayment obligations relative to pretax monthly income was only 12.2 percent. The lined-out area on the table isolates the income and debt categories that would be affected by a 40 percent debt limit established by lenders. This isolation section covers a larger portion of the table for a five-year repayment period.

Those students who will find a significant part of their debt capacity absorbed by student loan repayment obligations are those who borrow for graduate degrees (cumulative borrowing greater than $12,500),

EXHIBIT 9

CUMULATIVE DEBT AND MONTHLY REPAYMENT SCHEDULE

(Assume nine percent annual interest rate)

Amount of Accumulated Debt	Monthly Payment	
	10-Year Payout[a]	5-Year Payout[b]
$31,000	$392.69	$643.51
25,000	316.69	518.96
21,000	266.02	435.93
16,000	202.68	332.13
14,000	177.35	290.62
12,500	158.34	259.48
11,500	145.68	238.72
10,400	131.74	215.89
8,000	101.34	166.07
6,000	76.01	124.55
4,000	50.67	83.03
2,500	31.67	51.90

[a]Annuity factor for .75% for 120 months = 78.9417

[b]Annuity factor for .75% for 60 months = 48.1734

EXHIBIT 10

MONTHLY DEBT PAYMENTS AS A PERCENTAGE OF MONTHLY PRETAX INCOME: TEN-YEAR REPAYMENT PERIOD, NINE PERCENT INTEREST

	Monthly Pretax Income (Percentages)					
Loan Amount	$2000	$1667	$1500	$1250	$833	$417
$31000	19.6%	23.6%	26.2%	31.4%	47.2%	94.2%
25000	15.86	19.0	21.1	25.4	38.1	76.0
21000	13.3	15.9	17.7	21.3	31.9	63.8
16000	10.2	12.2	13.5	16.2	24.4	48.7
14000	8.9	10.6	11.8	14.2	21.2	42.4
12500	7.9	9.5	10.5	12.6	19.0	37.9
11500	7.3	8.8	9.7	11.7	17.5	35.0
10400	6.6	7.9	8.8	10.6	15.8	31.7
8000	5.1	6.1	6.7	8.1	12.1	24.2
6000	3.8	4.6	5.1	6.1	9.1	18.2
4000	2.6	3.1	3.4	4.1	6.1	12.2
2500	1.6	1.9	2.1	2.6	3.8	7.7

EXHIBIT 11

MONTHLY DEBT PAYMENTS AS A PERCENTAGE OF MONTHLY PRETAX INCOME: FIVE-YEAR REPAYMENT PERIOD, NINE PERCENT INTEREST

	Monthly Pretax Income (Percentages)					
Loan Amount	$2000	$1667	$1500	$1250	$833	$417
$31000	32.2%	38.6%	42.9%	51.5%	77.3%	154.4%
25000	25.9	31.1	34.6	41.5	62.3	124.4
21000	21.8	26.2	29.1	34.9	52.3	104.6
16000	16.6	19.9	22.1	26.6	39.9	79.6
14000	14.6	17.5	19.4	23.3	34.9	69.8
12500	13.0	15.6	17.3	20.8	31.2	62.4
11500	11.9	14.3	15.9	19.1	28.7	57.3
10400	10.8	13.0	14.4	17.3	25.9	51.8
8000	8.3	9.96	11.1	13.3	19.9	39.8
6000	6.3	7.5	8.3	10.0	15.0	30.0
4000	4.2	5.0	5.5	6.6	10.0	19.9
2500	2.6	3.1	3.5	4.2	6.2	12.5

who take positions that offer less than $18,000 ($1,500 per month), or who attempt to repay their debt in five years. The survey of starting salaries indicated that few of the occupations covered in that survey offered a salary lower than $18,000 for a person with an advanced degree.

A point of concern that is apparent from the analysis is that undergraduate students in the occupations traditionally held by women (nursing, teaching, social work), which are characterized by very low starting salaries, will feel the greatest impact of education loans on their post-education ability and willingness to borrow. To alleviate this problem, schools could direct more grant funds or scholarship moneys into those major areas where supply is short but salaries have not adjusted to reflect the shortage.

Because of a low level of anticipated future income, students in these areas of study may be unwilling to commit themselves to student loans. This hidden demand for student loans from those entering underpaid professions raises an interesting question for the National Commission on Student Financial Assistance. On the one had, some students may opt for a GSL, even though they recognize that their probabilities of repaying the loans are slim. Their ultimate defaults contribute to the public perception that students are taking undue advantage of the loan program. However, if demanding credit standards had been required of lenders, these loans probably would not have been made. Given the lack of incentive for lenders to apply strict credit standards, these "loans" become de facto grants. On the other hand, many students (whose numbers cannot be measured) use self-restraint and do not borrow under the government student loan programs. They may borrow smaller amounts

than needed from more costly sources, work part-time (possibly with an unfavorable effect on their academic record), or change their course of study. Rather than give de facto grants to risk-taking students and none to the financially cautious, it may be preferable for both governments and universities to channel grants on the basis of ability (not need) to students entering these professions and to provide the loan funds to those whose selection of educational programs and profession create an ability to repay these loans. Were this approach to be adopted, the default rates on student loans would decline and outstanding students entering nursing, teaching, and social work would be more equitably treated and avoid tarnishing their credit records.

IV. Future Trends in College Debt Burden

Although the analysis of 1981 data did not reveal serious problems in terms of the debt burden represented by student borrowing at the time of graduation, recent historical trends in college costs and starting salaries for college graduates suggest that serious problems may materialize. In addition, with the increase in borrowing limits instituted in 1980 and lenders' reluctance to handle small loans, average cumulative education loan balances have increased since 1981.[10] From 1979 to 1981, college costs at public and private institutions increased by 22.7 percent and 26.1 percent respectively. During the same period, discretionary income for families with dependents in college increased by 6.8 percent.[11] Given these trends, one needs to ask how much of a graduate's debt capacity will be absorbed by student debt in 1987 or 1988.

To answer this question we projected annual college costs to 1988 for public and private schools. These projections were made using data

generated by the Educational Testing Service and described in "Discretionary Income and College Costs." The annual college cost projections are shown in Exhibit 12. The projections were made assuming an annual rate of increase of 8 percent for public school costs and 9.5 percent for private school costs. These figures are consistent with the observed rate of increase in college costs from 1979 to 1981.

With this data series, total costs of a four-year degree from a public or private school were calculated. To estimate cumulative debt we used historical data showing that median cumulative student loans at the time of graduation in 1977 represented approximately 39 percent of total college costs for students who borrowed. With an assumption that students would continue to use student loans to fund approximately 40 percent of total college costs, we obtained expected median cumulative debt burdens for students graduating from four-year degree programs in 1982-1988 (Exhibit 13).

To determine how much of graduates' debt capacity was absorbed by the levels of debt shown in Exhibit 13, estimates of median starting salaries for the period 1981-1988 were needed. The median starting salary for a college graduate with a bachelor's degree in 1977 was $9,500.[12] Using this as a base, the Educational Policy Research Institute generated a beginning median monthly salary series from 1982 to 1988 using projections of the change in Gross National Product Implicit Price Deflator (GNP-IPD) to estimate the annual inflation during that period.

Finally, monthly loan payments for the various levels of cumulative borrowings were calculated assuming a ten-year repayment period and a nine percent annual interest cost. It is apparent in Exhibit 13 that cumulative borrowing by students attending private institutions will

EXHIBIT 12

ANNUAL COLLEGE COSTS

	Private (all schools)	Public (all schools)
1977	$ 4152	$1900
1978	4477	2009
1979	4908	2163
1980	5466	2372
1981	6190	2653
1982	6778	2865
1983	7422	3094
1984	8127	3342
1985	8899	3609
1986	9745	3898
1987	10671	4210
1988	11684	4547

SOURCE: Educational Testing Service, "Discretionary Income and College Costs."

generated by the Educational Testing Service and described in "Discretionary Income and College Costs." The annual college cost projections are shown in Exhibit 12. The projections were made assuming an annual rate of increase of 8 percent for public school costs and 9.5 percent for private school costs. These figures are consistent with the observed rate of increase in college costs from 1979 to 1981.

With this data series, total costs of a four-year degree from a public or private school were calculated. To estimate cumulative debt

EXHIBIT 13

MEDIAN BORROWING (FOUR YEARS OF COLLEGE)[1]

	Private School	Public School
1980	$ 7601	$3378
1981	8417	3679
1982	9336	4021
1983	10343	4393
1984	11407	4782
1985	12490	5164
1986	13678	5577
1987	14977	6024
1988	16400	6506

SOURCE: Educational Testing Serivce, "Discretionary Income and College Costs."

[1]Assume 40.0 percent of total cost of college is funded by student loans. The total cost used in the calculation of cumulative borrowing for a graduate in 1983 is the sum of the annual cost shown in Exhibit 12 for 1980, 1981, 1982, 1983.

exceed the current $12,500 limit in 1986-1988. This finding suggests that the loan maximum should be indexed to reduce the possibility that students will be restricted from attending private schools in the near future. Otherwise, private schools may be seriously disadvantaged relative to public schools during the latter part of the 1980s. It is questionable whether a student loan program should inadvertently create the potential of restructuring the American educational system.

Finally, the ratios of median debt payments to pretax income were calculated for the graduating student who borrowed the median amount of student loans and took a job offering the median starting salary (Exhibit 15). Over the period 1982-1988 students' educational debts would gradually absorb more of their total debt capacity whether they were attending a private or a public institution. The trend is significantly more noticeable in the private school series. If by 1933, students attending private schools are allowed to borrow as much as is shown in Exhibit 13, repayments on debt obligations would be more than ten percent of pretax monthly income. Given current levels of market and self-imposed debt limits, such loan repayment obligations represent an important portion of a graduate's debt capacity for the student in the median debt range.

An important point to note in this analysis is the role of the assumptions. Rates of increase in college costs and expected starting salaries and the diversity between the two assumed rates determine to a large extent the impact of student loan debt repayments on the noneducation debt capacity of the graduate. In addition, the assumption concerning the percentage of college costs that are covered by borrowed funds is very important in the analysis. If students financed more than 40 percent of college costs with debt, the effect on unused debt capacity would be correspondingly more severe than what is shown in our figures.

EXHIBIT 14

PROJECTED DEBT BURDEN
(Graduate with bachelor's degree)

	Median figures		
	Monthly Pretax Income	Monthly Loan Repayment (10-year repayment period)	
		Public	Private
1977	$ 792	$43	$ 96
1981	1108	47	107
1982	1192	51	118
1983	1278	56	131
1984	1363	61	145
1985	1445	65	158
1986	1527	71	173
1987	1614	76	190
1988	1706	82	208

EXHIBIT 15

MEDIAN DEBT PAYMENT AS A PERCENTAGE

OF MONTHLY INCOME

	Public School	Private School
1981	4.2%	9.7%
1982	4.3	9.9
1983	4.4	10.3
1984	4.5	10.6
1985	4.5	10.9
1986	4.6	11.3
1987	4.7	11.8
1988	4.8	12.2

V. Implications for the Future

The purpose of this study is to analyze whether the growth of students' borrowings may "shoulder out" other forms of consumer debt used to acquire services or to purchase homes, automobile, furniture, and other consumer durables. Were this to be the case, an intangible consumer asset--education--would replace other consumer assets, such as homes and automobiles. Such a shouldering out would occur if (1) consumers' total debt were restricted by an effective limit imposed by credit grantors or by consumers themselves; and (2) consumers prefer education as an asset to other goods and services that they might acquire with credit.

These two prerequisites for shouldering out are examined in the following two sections from two points of view. First, we assume a continuation of past debt burdens projected from the historical data presented earlier concerning creditors' aggregate debt limits and consumers' self imposed debt limits. Further, we assume the legislative climate and credit culture that existed in 1980-81, without reflecting reactions to the rather dramatic changes in creditors' experience under the reforms in the Bankruptcy Code. Second, we analyze the changes that are likely to occur that will affect limits on consumers' total debt and their appraisal of education as a preferred asset.

A. Future Debt Burdens Based on Past Data and Present Credit Culture

As explained in the earlier sections, projections of debts to finance the costs of education versus expected incomes of graduates of colleges and universities do not indicate that consumers' aggregate

debts will generally violate the standards imposed by government standards for housing loans and standards established by commercial banks, the dominant lending group in the private sector. Indeed, the evidence suggests that the self-imposed standards of consumers are often more stringent than the limits set by credit grantors.

Furthermore, the standards imposed by credit grantors are obviously diverse, even among the bankers who might be considered as the most rigorous of lenders. Evidence from the Credit Research Center's consumer bankruptcy study indicates clearly that other credit grantors do not impose rigorous limits on consumers' use of debt. Had the market "worked" to restrict consumers' use of debt ot affordable levels, we would not observe a significant proportion of consumers whose debts greatly exceeded their incomes filing for straight bankruptcy (chapter 7). Thus, under the present credit culture it is possible for consumers to finance their education and credit purchases of most other goods and services without market restraints.

Nonetheless, we observe two areas where credit limits may cause a shouldering aside of other forms of credit. First, students entering low-paying professions, such as nursing, may find it impossible to assume educational debts as well as large amounts of debts for other goods and services. Barring a substitution of direct grants-in-aid for educational loans, these constrained students have two main options--restrict their use of debt or assume more debt than they feel that they can afford.

On the one hand, they may postpone the purchase of less-preferred goods and services until their incomes rise or their students loans are significantly reduced. Surveys of consumers taken in 1977 and 1979 reveal the less-preferred uses of credit (Exhibit 16). In the two most recent surveys consumers were asked a question like the following (1979):

> People have many different reasons for borrowing money which they pay back over a period of time. For each of the reasons listed on this card, please tell me if you feel it is alright or not for someone like yourself to borrow money.

In each of the surveys the most preferred credit uses were to cover expenses due to illness, to finance educational expenses, and to finance the purchase of a car. The findings suggest that these uses would shoulder aside the use of credit for such purposes as to finance boats, snowmobiles and other hobbies, vacations, fur coats and jewelry if a consumer did limit his or her own use of credit.

On the other hand, some students may assume excessive debt burdens and subsequently discharge a significant portion of the burden by electing bankruptcy (chapter 7). Under the provisions of the Bankruptcy Code most unsecured creditors receive little or no repayment on their claims. Further, even though many student loans may not be discharged, discharge may be permitted by the courts when denial of discharge would impose an undue hardship on the debtor or the debtors' dependents. Given the low salaries in some fields financed by student loans, it may not be difficult to prove hardship in many cases. (Educational loans may also be discharged under chapter 7 when the loan was scheduled to mature more than five years before the date of bankruptcy.) In effect, these educational loans become grants that are subsidized by other consumers who repay their debts, most particularly their unsecured debts.

EXHIBIT 16

ATTITUDES TOWARDS INSTALMENT DEBT USE

(Percent Favoring Use)

Appropriate Reasons for Borrowing	1977[a]	1979[b]
Cover expenses due to illness	85	75
Finance educational expenses	80	71
Finance purchase of a car	84	84
Finance purchase of furniture	60	54
Consolidate bills	47	42
Cover living expenses when income is cut	49	39
Finance boats, snowmobiles and other hobby items	23	19
Cover expenses of vacation	17	16
Finance the purchase of fur coat or jewelry	6	6

[a]Durkin and Elliehausen, op. cit., p. 53

[b]Dunkelberg, et al., CRC 1979 Consumer Financial Survey (West Lafayette, IN: Credit Research Center Purdue Univeristy, 1981), p. 251. Based on survey of 3,572 consumers in four local markets in Arkansas, Illinois, Louisiana, and Wisconsin.

A second area where shouldering aside or postponement of credit purchases may occur is credit for the purchase of residential property. In contrast to the nonexistent or variable credit standards in the consumer credit field, the strictures covering conventional, FHA, and VA loans are fairly rigid. Also, the originators and purchasers of residential mortgages have a strong incentive to adhere to or even improve upon those standards to insure the marketability of their loans.

Consequently, whereas we might discover that consumers have relatively little difficulty in finding some creditor to bend standards to finance the purchase of a motorcycle, TV set, or microwave oven, the probability of evading the mortgage lending standards outlined earlier are slim. As a result, we expect to find consumers whose personal debt limits exceed those of mortgage lenders to be rationed out of the mortgage credit market. As observed earlier, the "pinch" is most likely to affect students graduating in the period 1985-1988.

A number of caveats need to be made lest growth in educational loans be blamed for a recession in residential construction. First, it is inappropriate to assume that educational loans are the sole cause of postponed home purchases. Unless the consumer has other consumer debts, educational debt alone are unlikely to foreclose a graduate from purchasing a home on credit. At worst, educational debt may not permit the scale of residence to which the graduate would like to become accustomed. Second, it would be extremely difficult to disassociate the effects of educational loans on graduates' financing of residential property. Many demographic factors are at work that are likely to reduce the purchases of traditional three-bedroom suburban homes by consumers

aged 25-35. Demographic data indicate that young consumers have smaller families and are likely to have both partners working. With this work pattern, higher energy costs, and the revitalization of many downtown areas, young couples may not wish to acquire a mortgage to buy the traditional suburban home. Instead, they may want a small, downtown apartment. Very likely such changes as these will impact the growth and nature of the residential construction business far more than the growth in student loans.

B. Future Debt Burdens Based on Potential Changes in the Credit Culture

1. Changes in limits on aggregate debt.

The marked increases in creditors' bankruptcy losses will surely set in motion legislative or economic responses. On the one hand, it is possible that Congress may establish some standards for admission to chapter 7. On the other hand, creditors have already taken steps to limit further bankruptcy losses by reducing their unsecured loans and placing greater reliance on secured loans, especially those secured by real property.

As creditors depend more heavily on real property for security, usually through second mortgage loans, the limits on credit availability will impact recent college graduates fairly heavily. As indicated in the previous section, the relatively inflexible standards of mortgage lenders and the demand for a uniform, and relatively assured quality mortgage instrument in the secondary market are likely to make it difficult for some recent graduates to finance homes. However, the limits imposed by mortgage lenders will now impact the availability of other forms of consumer

credit. Without a residence upon which to base a second mortgage, many graduates will find it more difficult to obtain other forms of consumer credit than they have in the past. With lower overall limits, there will be more shouldering aside of other forms of credit. However, the process by which this will occur will be roundabout and difficult to trace, since it moves from the bankruptcy problem via restrictions on mortgage credit to reduce the availability of other forms of consumer credit.

Another important response currently underway has been the development of more sophisticated monitoring systems to provide an early warning of potential bankrupts. For example, firms specializing in credit scoring have been analyzing account payment patterns (especially in the case of revolving credit) through a process termed "performance scoring" in order to detect potential bankrupts. Credit reporting agencies provide two types of services aimed at reducing creditors' exposure to bankruptcies. One service is to screen all credit cards that are due to expire against criteria from the credit reports that are established by the credit grantor. On the basis of this analysis consumers who have a high probability of becoming bankrupts are denied a renewal card. Another type of service is to monitor all open accounts against data in credit reports that are found to be associated with overuse of credit. Thus, credit grantors are notified if a particular account suddenly has a large number of "inquiries" reported. An inquiry represents an effort by the consumer to obtain credit from a creditor. Multiple inquiries may indicate a sudden change in self-restraint or an adverse credit picture that has forced the consumer to seek credit from different and, perhaps, more lenient sources.

These improvements in the system of evaluating credit quality will also have the effect of reducing the availability of credit to consumers who would otherwise assume excessive debts. Again, the result will be a further shouldering aside of other forms of consumer credit in favor of educational debts. However, from society's viewpoint, this result should be preferred to a situation wherein consumers who repay their obligations are indirectly providing grants to college graduates who have sought chapter 7 to shed most, if not all, of their unsecured debts.

2. Increase in average size of educational loans

At the same time that we anticipate a lowering of aggregate credit limits, we also anticipate an increase in the average size of post-graduation debts. This increase is likely to occur for several reasons. First, as discussed earlier in this study, we perceive a need to raise the maximum limit on student loans in the latter part of the 1980s to avoid disadvantaging the private schools. Second, the long-term rise in operating costs discourages lenders from making small loans. As fixed handling costs rise, the breakeven size of student loan also increases. Further, fixed administrative costs and collection costs also mitigate against lending to freshmen, students in two-year colleges and trade schools, where loans are smaller and credit risks are higher. Thus, the cost/revenue squeeze naturally forces lenders to favor making loans to students in four-year programs at the beginning of the sophomore year and to students in post-graduate schools.

In summary, we anticipate that the present credit culture will change--that aggregate credit limits will decline at the same time that average student loans increase in size. Thus, we expect to see greater

shouldering aside of other forms of consumer credit and of mortgage credit than would be anticipated if one merely projected the data from the 1970s into the 1980s. However, we still do not believe that it will have a significant or very deletorious effect on the economy. Further, if markets are permitted to operate freely, the forms of credit shouldered aside will be used for purposes less preferred by consumers than education.

VI. Conclusions

This study has reached a number of conclusions that are highly relevant to the deliberations of the National Commission on Student Financial Assistance.

1. There are limits set on the aggregate amounts of debts that consumers may assume. The most uniform are those set regarding residential mortgages. A number of commercial bankers establish aggregate limits, but they vary widely. Other creditors are even less exacting, in part because the information system does not provide sufficient data to assess credit risk with great accuracy. Consumers also limit their use of debt voluntarily, often at lower levels than would be permitted by credit grantors. Thus, many have unused debt capacity. Other consumers can and do obtain large amounts of debt relative to income. Except in a few cases, it appears unlikely that educational debt may shoulder aside other forms of credit to the detriment of automobile sales or homebuilding.

2. At the margin, consumers most likely to be affected by debt limits are those who plan to enter the poorly-paid vocations, such as nursing or teaching. Since students in this field may self-impose debt limits and hamper their education, it may be preferable to design a grant program to support their education.

3. Because of the fairly rigid, but high, limits on debt placed by mortgage lenders, some consumers may find it necessary to postpone acquiring a home, or may need to settle for a smaller home than they might wish. But, since other forms of credit must share the responsibility for pushing those borrowers to the debt limit, it is not appropriate to focus on student loans as the "cause" of declines in residential construction. We have suggested that, even without student loans, there may be other reasons for the problems of the residential construction industry.

4. If the trends in educational costs and incomes of the past are projected into the late 1980s, we anticipate greater shouldering aside of other forms of credit than will prevail in the early part of the decade. The inflation in educational costs, coupled with the differences in costs of public and private schools, suggests a need to index the maximum allowable student loan to avoid disadvantaging private schools relative to public schools.

5. Finally, if we modify the extrapolated projections of the past to take into account the anticipated changes in the credit culture, we expect to see a lowering of aggregate credit limits and an increase in the average size of student loans owed following graduation. So long as the government does not make an effort to allocate credit and leaves the choice to consumers, our survey data suggest that loans to finance education will be preferred by consumers to loans to finance purchases that might be classed by some as luxuries.

FOOTNOTES

[1]"Guaranteed Student Loans: A Packground Paper," National Commission on Student Financial Assistance, Report No. 1, March 1982, p.1.

[2]H. J. Flamer, D. H. Horch and S. Davis, "Talented and Needy Graduate and Professional Students: A National Survey of People Who Applied for Need-Based Financial Aid to Attend Graduate and Professional School in 1980-81, " Princeton, NJ: Educational Testing Service, April 1982, p. 7.11.

[3]See, A. Charlene Sullivan, "Effects of Consumer Loan Rate Ceilings on Competition Between Banks and Finance Companies," Working Paper No. 38, West Lafaytte, IN: Credit Research Center, Purdue University, 1981.

[4]T. A. Durkin and G. Elliehausen, 1977 Consumer Credit Survey, Washington, D.C.: Federal Reserve Board of Governors, 1978, p. 93.

[5]Ibid, p. 94.

[6]John B. Lee, "Study of Guaranteed Student Loan Default Rates," 1982, Table 6.

[7]"Discretionary Income and College Costs," The Education Policy Research Institute of the Educational Testing Services for the National Commission on Student Financial Assistance, August 1982, p. 9.

[8]Ibid., p. 11

[9]H. J. Flamer, D. H. Horch and S. Davis, "Talented and Needy Graduate and Professional Students: A National Survey of People Who Applied for Need-Based Financial Aid to Attend Graduate and Professional School in 1980-81," Princeton, NJ: Educational Testing Service, April 1982, p. 7.4.

[10]Statement of Ralph Olmo, Conptroller, U.S. Department of Education before the National Commission on Student Financial Assistance, January 14, 1983. p. 5.

[11]"Discretionary Income and College Costs," p. 7

[12]Ibid., p. 9.

APPENDIX A

1. Mail Questionnaire

December 2, 1982

CREDIT RESEARCH CENTER
Krannert Graduate School of Management
Purdue University
West Lafayette, IN 47907

Dear CBA Member:

With the cooperation of the Consumer Bankers Association, we are undertaking a short survey to determine whether lending officers at commercial banks have guidelines or policies that limit the aggregate amount of consumer and mortgage debt that consumers may have. If there are such guidelines, we would like to know what they are.

Additionally, Drew Tidwell has suggested that it would be helpful to the Consumer Bankers Association to know your bankruptcy losses for the first halves of 1981 and 1982.

We know that this is a busy season for you, but we have little choice in timing of our survey. We need the data as soon as possible. We have enclosed a stamped self-addressed envelope for your convenience to return the questionnaire. Thank you for your consideration.

Part I - Debt Limits

1. As a matter of lending policy, do you follow guidelines limiting the total amount of consumer and mortgage debt from all sources, including the loan being requested, that an acceptable applicant for a loan may have?

___ Yes

___ No Go to Question 3

2. How is your limit on total debt measured?

Use this measure?			Maximum percentage generally permitted
a. Total consumer and mortgage debt / Pretax income	___ Yes	___ No	_____%
b. Total consumer and mortgage debt / After-tax income	___ Yes	___ No	_____%

Use this measure?			Maximum percentage generally permitted
c. Total monthly payments on mortgage and consumer debt / Monthly pretax income	___ No	___ Yes	_____%
d. Total monthly payments on consumer instalment and revolving credit accounts / Monthly pretax income	___ No	___ Yes	_____%
e. Total monthly payments on mortgage and consumer debts + property taxes, insurance, utilities / Monthly pretax income	___ No	___ Yes	_____%
f. Total monthly payments on mortgage and consumer debts + property taxes, insurance, utilities / After-tax monthly income	___ No	___ Yes	_____%
g. Other ratio or ratios used and maximums permitted	_____		_____%
	_____		_____%

3. Have you any comments that would explain further how your bank limits the aggregate amount of consumer debts or that would explain why you have not set some sort of guidelines?

_____

_____

_____

_____

_____

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